

**CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT**

**Indiana-American Water Co., Inc.
South Side of Utica Pike at Allison Lane
Jeffersonville, Indiana 47130**

is hereby authorized to construct

one (1) 6.83 MMBtu/hr No. 2 diesel fuel fired reciprocating internal combustion emergency generator, identified as Generator 01.

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP-019-10148-00095	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

Construction Conditions

General Construction Conditions

1. That the data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).
2. That this permit to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

3. That pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.
4. That pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. That notwithstanding Construction Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

6. That this document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:
 - (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
 - (c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
 - (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1-7.1(Fees).

- (e) Pursuant to 326 IAC 2-1-4, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. The operation permit issued shall contain as a minimum the conditions in the Operation Conditions section of this permit.
7. That when the facility is constructed and placed into operation the following operation conditions shall be met:

Operation Conditions

General Operation Conditions

1. That the data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).
2. That the permittee shall comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder.

Preventive Maintenance Plan

3. That pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:
 - (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
 - (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
 - (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

Transfer of Permit

4. That pursuant to 326 IAC 2-1-6 (Transfer of Permits):
 - (a) In the event that ownership of this emergency generator is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
 - (b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.
 - (c) The OAM shall reserve the right to issue a new permit.

Permit Revocation

5. That pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:
- (a) Violation of any conditions of this permit.
 - (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
 - (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
 - (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
 - (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

Availability of Permit

6. That pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of this source and shall make this permit available for inspection by the IDEM, (local agency if applicable) or other public official having jurisdiction.

Malfunction Condition

7. That pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):
- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
 - (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
 - (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
 - (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

Annual Emission Reporting

8. That pursuant to 326 IAC 2-6 (Emission Reporting), the Permittee must annually submit an emission statement for the source. This statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30.

Opacity Limitations

9. That pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:
- (a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.
 - (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 1 minutes (60 readings) in a 6 hour period.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name: Indiana-American Water Co., Inc.
Source Location: South Side of Utica Pike at Allison Lane, Jeffersonville, Indiana 47130
County: Clark
Construction Permit No.: CP-019-10148-00095
SIC Code: Private Water Company
Permit Reviewer: SDF

The Office of Air Management (OAM) has reviewed an application from Indiana-American Water Company, Inc. relating to the construction and operation of the following equipment:

one (1) 6.83 MMBtu/hr No. 2 diesel fuel fired reciprocating internal combustion emergency generator, identified as Generator 1.

Stack Summary

There are no stacks associated with the equipment of this source.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on September 15 1998.

Emissions Calculations

See attached spreadsheets for detailed calculations (7 Pages).

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	2.1	2.1

Particulate Matter (PM10)	N/A	N/A
Sulfur Dioxide (SO ₂)	15.1	15.1
Volatile Organic Compounds (VOC)	3.0	3.0
Carbon Monoxide (CO)	24.2	24.2
Nitrogen Oxides (NO _x)	92.7	92.7
Single Hazardous Air Pollutant (HAP)	3.0	3.0
Combination of HAPs	3.0	3.0

Allowable emissions (as defined in the Indiana Rule) of oxides of nitrogen (NO_x) are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

County Attainment Status

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Clark County has been designated as nonattainment for volatile organic compounds. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Clark County has been classified as attainment or unclassifiable for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	2.1
PM10	N/A
SO ₂	15.1
VOC	3.0
CO	24.2
NO _x	92.7
Single HAP	3.0
Combination HAPs	3.0

This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater, no nonattainment pollutant is emitted at a rate of 100 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 and 2-3, and 40 CFR 52.21, the PSD and Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

1. New Source Performance Standards (326 IAC 12) and 40 CFR Part 60:

40 CFR 60.330 - 60.335, Subpart GG, Standards of Performance for Stationary Gas Turbines, does not apply to the proposed emergency generator because the generator is not a stationary gas turbine as defined in 40 CFR 60.331(a). The generator is a general utility reciprocating engine.
2. There are no National Emission Standards for Hazardous Air Pollutants (326 IAC 12) and 40 CFR Part 61 applicable to the proposed equipment.
3. There are no National Emission Standards for Hazardous Air Pollutants (326 IAC 12) and 40 CFR Part 63.

State Rule Applicability

1. 326 IAC 1-5 (Emergency Reduction Plans)

The proposed generator is not subject to 326 IAC 1-5 (Emergency Reduction Plans) because there are no pollutant PTE of 100 tons per year or more.
2. 326 IAC 1-6 (Malfunctions)

The proposed generator is subject to 326 IAC 1-6 (Malfunctions) because the proposed equipment will be permitted pursuant to 326 IAC 2-1-4.
3. 326 IAC 1-7 (Stack Height Provisions)

The proposed generator is not subject to 326 IAC 1-7 (Stack Height Provisions) because there is no stack associated with the proposed equipment.
4. 326 IAC 2-6 (Emission Reporting)

This facility is subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 10 tons/yr (for specific counties) or 100 tons/yr of VOC. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

5. 326 IAC 5 (Opacity Limitations)

The proposed generator is subject to 326 IAC 5 (Opacity Limitations). Pursuant to this rule, except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:

- (a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings/
- (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 1 minutes (60 readings) in a 6 hour period.

6. 326 IAC 7 (SO₂ Emission Limitations)

The proposed generator is not subject to 326 IAC 7 (SO₂ Emission Limitations) because the facility SO₂ emissions (15.1 ton/yr) are less than the applicable SO₂ level of 25 ton/yr.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) The proposed generator in this permit will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.
- (b) See attached spreadsheets for detailed air toxic calculations.

Conclusion

The construction of the proposed generators will be subject to the conditions of the attached proposed **Construction Permit No. 019-10148-00095**.

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE: IT HAS POTENTIAL TO EMIT 25 LBS/HR PARTICULATES ?_____, 100 LBS/HR VOC ?_____, 100 LBS/HR SULFUR DIOXIDE ?_____, OR 2000 LBS/HR OF ANY OTHER POLLUTANT ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____

LOCATION: (CITY AND COUNTY) _____

PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/19____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/19____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____

(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

REV 3/96

FAX NUMBER - 317 233-5967

*SEE REVERSE

PAGE 1 OF 2

**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO₂, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

326 IAC 1-2-39 “Malfunction” definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m. : 11 IR 2373)

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Emission Calculations

Indiana-American Water Company, Inc.

Indiana-American Water Company, Inc. has submitted an application to add the following emergency generator to their existing source:

1. one (1) 6.83 MMBtu/hr No. 2 diesel fuel fired reciprocating internal combustion emergency generator, identified as Generator 1.

The following calculations determine the potential, allowable, and potential emissions after controls.

Potential Emissions:

The following calculations determine the potential emissions from Generator 1 based on No. 2 diesel fuel combustion, a maximum design capacity of 6.83 MMBtu/hr, 8,760 hours of operation, and emission factors from AP-42, Chapter 3.4.

The following are a summary of the emission calculation results as calculated using the attached standard combustion spreadsheet.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
Combustion	2.1	N/A	15.1	92.7	3	24.2

Allowable Emissions:

The estimated potential emissions from the generator is determined to be equal to the allowable emissions in this case. Thus, the adjusted allowable emissions are the estimated potential emissions.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
Combustion	2.1	N/A	15.1	92.7	3.0	24.2

Emissions After Controls:

There are no controls associated with the generator. Thus, the emissions after controls from the generator equal the estimated potential emissions.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
Combustion	2.1	N/A	15.1	92.7	3.0	24.2

Emission Summary:

The following is a summary of the above estimated emission calculations:

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
Potential	2.1	N/A	15.1	92.7	3.0	24.2
Allowable	2.1	N/A	15.1	92.7	3.0	24.2
After Controls	2.1	N/A	15.1	92.7	3.0	24.2

Rule Applicability:

State Construction Permits [326 IAC 2-1-3]:

Pursuant to 326 IAC 2-1-3, sources with adjusted allowable emissions of twenty-five (25) tons per year of any regulated pollutant, ten (10) tons per year of any single HAP, or twenty-five (25) tons per year combined, shall obtain a construction permit.

The adjusted allowable emissions are the lesser of the potential and any allowable emissions rate established based on a limitation required by a state or federal rule.

The estimated potential emissions from the proposed generator are determined to be equal to the allowable emissions in this case. Thus, the adjusted allowable emissions are the estimated potential emissions.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
Generator	2.1	N/A	15.1	92.7	3.0	24.2

Ap. Thresholds	25 tpy	N/A	25 tpy	25 tpy	25 tpy	25 tpy
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Largest Single HAP tons/yr	Combined HAPs tons/yr
3.0	3.0

Applicable Level	10 tons/yr	25 tons/yr
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The oxides of nitrogen (NOx) emissions exceed the applicable level of 25 tons per year. Thus, a state construction permit is required.

Prevention of Significant Deterioration (PSD) Requirements [326 IAC 2-2 and 2-3]:

No pollutant emissions exceed their respective major source levels.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
After Controls	2.1	N/A	15.1	92.7	3.0	24.2

App. Level	250 tons/yr	N/A	250 tons/yr	250 tons/yr	100 tons/yr	250 tons/yr
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Thus, pursuant to 326 IAC 2-2, 326 IAC 2-3, and 40 CFR 52.21, the PSD and emission offset requirements do not apply in this case.

Part 70 Determination [326 IAC 2-7 (Part 70 Permit Program)]:

The emissions generated by this source are the emissions from the generator proposed in this permit. The PTE from this source is therefore equivalent to the emissions estimations from the generator. A summary of the emissions is listed below:

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
Generator	2.1	N/A	15.1	92.7	3.0	24.2

App. Level	100 tons/yr	N/A	100 tons/yr	100 tons/yr	100 tons/yr	100 tons/yr
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Largest Single HAP tons/yr	Combined HAPs tons/yr
3.0	3.0

Applicable Level	10 tons/yr	25 tons/yr
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This new source is not subject to the Part 70 permit requirements because the potential to emit (PTE) of:

- each criteria pollutant is less than 100 tons per year.
- a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- any combination of HAPs is less than 25 tons per year.

This is the first air approval issued to this source.

Emergency Reduction Plans [326 IAC 1-5]:

Pursuant to 326 IAC 1-5-2, sources with potential to emit (PTE) of 100 tons per year or more of any pollutant, shall prepare and submit to Commissioner for approval, written emergency reduction plans consistent with safe operating procedures.

326 IAC 1-5 does not apply because there are no pollutant PTE of 100 tons per year or more.

Malfunctions [326 IAC 1-6]:

Pursuant to 326 IAC 1-6, the owner or operator of any facility required to obtain a permit under 326 IAC 2-1-2 and 326 IAC 2-1-4 shall meet the requirements of this rule. 326 IAC 1-6 does apply because the proposed generator will be permitted pursuant to 326 IAC 2-1-4.

Stack Height Provisions [326 IAC 1-7]:

The stack height provisions of 326 IAC 1-7 do not apply because there is no stack associated with the proposed emergency generator.

Emission Reporting [326 IAC 2-6]:

Pursuant to 326 IAC 2-6-1, sources with VOC, or NO_x PTE greater than 10 tons/yr in Floyd County, or PM₁₀, SO₂, or CO PTE greater than or equal to 100 tons per year in any county, shall be subject to the emission reporting requirements of this rule.

	PM tons/yr	PM ₁₀ tons/yr	SO ₂ tons/yr	NO _x tons/yr	VOC tons/yr	CO tons/yr
Source PTE	2.1	N/A	15.1	92.7	3.0	24.2

Ap. Thresholds	100 tpy	100 tpy	100 tpy	10 tpy	100 tpy	100 tpy
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Largest Single HAP tons/yr	Combined HAPs tons/yr
3.0	3.0

Applicable Level	10 tons/yr	25 tons/yr
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The NO_x PTE from the generators exceed the applicable level of 10 tons per year. Thus, 326 IAC 2-6 applies in this case.

Pursuant to 326 IAC 2-6, the Permittee must annually submit an emission statement for the source. This statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual statement must be submitted to:

Indiana Department of Environmental management
Technical Support and Modeling, Office of Air management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30.

Opacity Limitations [326 IAC 5]:

The proposed generator is subject to 326 IAC 5-1-2, opacity limitations. Pursuant to this rule, except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:

- (a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.
- (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

SO2 Emission Limitations [326 IAC 7]:

Pursuant to 326 IAC 7-1.1-1, all facilities with potential to emit of twenty-five (25) tons per year or ten (10) pounds per hour of SO2 are subject to the requirements of this rule. Since the SO2 emissions (15.1 ton/yr) are less than the applicable threshold, this rule does not apply.

New Source Performance Standards (NSPS) [326 IAC 12 (40 CFR 60)]:

40 CFR 60.330 -60.335, Subpart GG, Standards of Performance for Stationary Gas Turbines, does not apply to the proposed emergency generator because the generator is not a stationary gas turbine as defined in 40 CFR 60.331(a). The generator is a general utility reciprocating engine.

National Emission Standards for Hazardous Air Pollutants [40 CFR 61]:

There are no emission standards under this part that apply to the proposed generator.

National Emission Standards for Hazardous Air Pollutants [40 CFR 63]:

There are no emission standards under this part that apply to the proposed generator.

**Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Turbine (>600 HP)**

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Company Name: Indiana-American Water Company
City, Indiana: Jeffersonville, Indiana
Reviewer: SDF
Date: 10-06-98

CP#: 019-10148
Plt ID: 019-00095

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity
MM Btu/hr

S= 0.5 = WEIGHT % SULFUR

6.8

Emission Factor in lb/MMBtu	Pollutant					
	PM 0.0697	PM10 0.0573	SO2 0.5 (1.01S)	NOx 3.1	VOC 0.1	CO 0.81
Potential Emission in tons/yr	2.1	1.7	15.1	92.7	3.0	24.2

Methodology

Potential Throughput (hp-hr/yr) = hp * 8760 hr/yr

Emission Factors are from AP 42 Table 3.4-2 and Table 3.4-5

PM emissions calculated from AP42 (Fifth edition, January 1995), Table 3.4-5, Footnotes c and d.

1 hp-hr = 7000 Btu, AP42 (Fifth edition, January 1995), Table 3.3-2, Footnote a.

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)